5-19-1995

CropWatch No. 95-10, May 19,1995

Lisa Brown Jasa
University of Nebraska-Lincoln, ljasa@unlnotes.unl.edu

CROP WATCH

University of Nebraska Cooperative Extension
Institute of Agriculture and Natural Resources

No. 95-10
May 19, 1995

Evaluate costs, herbicides, erosion before cropping released CRP land

Individuals seeking early release of part or all of their CRP acres can register between now and June 2 with their local Consolidated Farm Service Agency Office (formerly ASCS). Producers planning to convert their CRP to crops, forage, grazing, or other agricultural practices will be required to meet with NRCS staff to develop a conservation system or haying or grazing plan.

Many producers are considering returning CRP acres to crops through the early release program. Before rushing into this, several things need to be considered. First, and foremost, is removal of existing vegetation. Although smooth brome, switchgrass, and other warm season grasses can be killed with tillage, herbicides, or a combination of both, it can be quite expensive, especially in spring. The moldboard plow is the only non-chemical method that will completely kill established vegetation. However, due to expense, time, and erosion considerations, this may not be viable. Some producers feel they can disk and kill most of the grass. This would require multiple diskings and fairly dry conditions. Perennial plants

(Continued on page 67)

Inside

Planting rushes forward

A few dry days early in the week were just enough of a window for many farmers to begin or continue corn planting. Producers are expected to plant as much as 10-15% of their acreage with each good day. (*See more on pages 66, 72*)

Southeast Nebraska farmers, who received more rain Tuesday, are facing the tightest planting pressures now. Producers planting after May 20 may want to assess their willingness to accept risks related to using long season hybrids and the potential yield loss from fall frost. They also will want to assess their ability to harvest and store a wet crop.

Corn rootworm hatch is expected to be delayed. While soil insecticides applied now will be closer to hatch, those applied two to three weeks ago may not be effective when needed.

Those producers nearing completion of corn planting are looking at their options for planting soybeans. In an average year, the optimum planting period for soybeans is May 15-25. Generally, soil temperatures, which are expected to climb quickly in the next two weeks, are at an appropriate level for planting.

The biggest problem with planting now may be if there is another spell of cool, wet weather. Soybean seeds will be more susceptible to damage from insects and disease than corn seeds were. Delayed planting may be appropriate if the fields are so wet that operations may cause compaction.

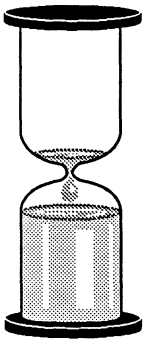
We will have more information related to these issues in next week's *CropWatch*.

Roger Elmore
Extension Crops Specialist
Bob Wright
Extension Entomologist
South Central District

CRP acres released for cow-calf operations

State assesses rain-delay strategies

Persistent rains, cool temperatures, and the limited progress with corn planting induced Gov. Ben Nelson to call a meeting of the Climate Assessment Response Committee recently to examine potential problems. Larry Sitzman, Director of the Nebraska Department of Agriculture, chaired the meeting with agricultural and climatology experts.



Nebraska Agricultural Statistics indicated that as of May 14, only 11% had been planted, compared to the five-year average of 72%. The eastern third of Nebraska was facing the most critical planting delays, due to the fact that eastern soils have higher clay content and tend to dry slowly.

Similarities were noted between this season and 1984 when farmers planted over 70% of the corn crop during the last two weeks of May. That year the state average yield was still above normal; however, the varieties planted generally required fewer GDD units to reach maturity. Nebraska agricultural experts are recommending that growers consider switching to shorter season hybrids if planting after May 20.

Don Wilhite and Allen Dutcher, both with the UNL Department of Agricultural Meteorology, presented precipitation statistics, and National Weather Service forecasts, which predicted a drier period developing.

Several speakers commented on potential problems with cow-calf operations due to the recent wet spell. Producers have reported an increase in calf sickness and weight gain problems because of the damp weather and muddy feedlots.

On an emergency basis, Consolidated Farmer Service Agency (formerly ASCS) is allowing the movement of cow-calf operations to nearby, drier CRP lands until June 10 in an effort to help alleviate the problem, according to Pat Brecka, CFSA Program Specialist. However, there are several stipulations which must be met first and individuals must seek formal approval before moving their cow-calf operations.

Requirements include: maintaining a cover so that the pasture is adequately protected from wind and water erosion; not haying the acreage; and not using areas within 20 feet of shrubs, forbs, or trees established as part of a CRP practice. No reduction in CRP payments will occur in conjunction with placing cattle on eligible land. Individuals can move their cow-calf operations to a neighbor's CRP lands for grazing as long as there is no exchange of money, products or services for the use. For more information, producers should contact their local CFSA Office.

Allen Dutcher
State Climatologist
Agricultural Meteorology

CROPWATCH

Crop Watch is published from March through November by the University of Nebraska Institute of Agriculture and Natural Resources Communications and Information Technology, PO Box 830918, 108 Agricultural Communications Bldg., UNL, Lincoln, NE 68583-0918. To order a subscription or to change your address, write to *Crop Watch*, Box 830918, 108 Agricultural Communications Bldg. or call (402) 472-7981.

Lisa Brown Jasa, Editor

For more information about a particular subject, write the authors at the addresses below:

UNL Department of Entomology
202 Plant Industry Bldg.
Lincoln, NE 68583-0816

UNL Department of Plant Pathology
406 Plant Science Bldg.
Lincoln, NE 68583-0722

UNL Department of Agronomy
279 Plant Science Bldg.
Lincoln, NE 68583-0915

UNL Department of Agricultural Meteorology
236 L.W. Chase Hall
Lincoln, NE 68583-0728

CRP decisions *(Continued from page 65)*

could easily re-root themselves under the wet conditions of 1995. For no-till, herbicides will be required. The choice of herbicides and rates will depend on the plant species and application timing (fall vs spring). Table 1, page 67, lists herbicide treatments for control of several perennial species and the amount of control expected with each. Note that much higher rates are required with spring than fall applications. Research at the Northeast Research and Extension Center near Concord suggests that Roundup at 1 qt/A controls 95% of smooth brome if applied in the fall. To get equal control in the spring, the rate needs to be increased to 2 to 2.5 qt/A. Preemergence corn herbicides such as atrazine or atrazine:cyanazine (Extrazine II) should improve control, but research has not confirmed this.

Finally, a combination of herbicides and tillage may be an option. Regardless of the control method, it will be quite expensive, especially during in spring.

In addition to vegetation control, one must also consider residue management, crop choice and rotation, soil fertility, soil moisture status, pest management, and above all, economics. For instance, soil tests on the CRP research plots show little to no nitrogen and the soil generally tests low for other key nutrients. Time and space does not permit detailed explanations of all of the problems which may arise when returning CRP acreage to crops. However, unforseen problems can arise and, like vegetation control, can be quite expensive to correct. The Northeast Research and Extension Center is conducting research on environmentally and economically sound methods of returning CRP to crop production. Once data is collected and analyzed, more information will be available for producers to make sound decisions.

Before returning these fragile acres to crop production, carefully consider your options and their ramifications. For more information on the ongoing CRP research, please contact the Northeast Research and Extension Center.

David L. Holshouser
Extension Weeds Specialist

Table 1. CRP or sod burndown response chart

Herbicide Treatment/Timing	*Rate*	*Alfalfa*	*Smooth Brome*	*Sweet Clover*	*Warm-Season Grasses*	*Wheatgrass*
Gramoxone Extra - Spring	1.5 pts	2	3	3	3	3
Gramoxone Extra - Spring	3.0 pts	3	4	4	4	4
Gramoxone Extra - Fall	1.5 pts	3	4	4	4	4
Gramoxone Extra - Fall	3.0 pts	5	4	4	5	5
Roundup - Spring	1.0 qt	4	6	5	6	6
Roundup - Spring	2.0 qts	6	8	7	8	8
Roundup - Fall	1.0 qt	6	8	7	8	8
Roundup - Fall	2.0 qts	8	10	9	10	10
Roundup + 2,4-D - Spring	1 qt + 1 pt	7	6	8	6	6
Roundup + 2,4-D - Spring	2 qt + 1 qt	8	8	9	8	8
Roundup + 2,4-D - Fall	1 qt + 1 pt	8	8	9	8	8
Roundup + 2,4-D - Fall	2 qt + 1 pt	9	10	10	10	10
Roundup + Banvel - Spring	2 qt + 0.5 pt	8	6	9	6	6
Roundup + Banvel - Spring	2 qt + 1 pt	9	8	10	8	8
Roundup + Banvel - Fall	2 qt + 0.5 pt	9	8	10	8	8
Roundup + Banvel - Fall	2 qt + 0.5 pt	10	10	10	10	10
Gramoxone + Atrazine	1.5 pt + 2.0 lb	5	7	7	3	7
Gramoxone + Extrazine	1.5 pt + 3.0 lb	5	7	7	3	7

Rating	% Control	Rating	% Control
10	96-100	6	70-79
9	90-95	5	60-69
8	85-90	<4	less than 60
7	80-84		

Stop downy brome or jointed goatgrass from going to seed in fallow

Wet and cool spring weather has prevented many "dryland" farmers from controlling weeds in their fallow fields. If farmers can get tractors and tillage tools into these fields, they are finding that anything less than extremely aggressive tillage (plowing or heavy disking) does not effectively control weed growth.

Downy brome seedheads are emerging and jointed goatgrass seedheads will soon follow. These weeds must be controlled quickly or viable seed will be produced. Downy brome and jointed goatgrass seed production in the fallow year is extremely undesirable and will drastically increase problems in succeeding wheat crops.

The few options available to farmers include applying Roundup, Roundup RT, or Landmaster BW. Apply Roundup or Roundup RT at 16 to 20 ounces of product per acre in 10 gallons or less of spray solution. Add surfactant at a rate of 2 quarts/100 gallons of spray solution. If broadleaf weeds are also a concern, apply Landmaster BW (a premix of Roundup and 2,4-D) at a rate of 54 to 68 ounces of product per acre. Add spray grade ammonium sulfate at 17 pounds/100 gallons of spray solution to treatments containing Roundup, Roundup RT, or Landmaster BW.

Most fallow fields probably require Landmaster BW because broadleaf weeds are prevalent. If downy brome has headed, use the higher herbicide rates. This will provide a quicker kill and may reduce the number of viable seed produced. Once downy brome or jointed goatgrass has headed, some viable seed will be produced, but the number of viable seed can be minimized by applying the higher herbicide rates as soon as possible.

Paraquat (Cyclone or Gramoxone Extra) provides rapid burn of plant tissue, and is effective when weeds are in the boot stage or later. Adding Bladex to paraquat greatly improves control. A one-hour rainfast period is sufficient for this tank mixture.

If soil conditions are too wet to allow for land application of herbicides, consider an aerial application. Roundup, Roundup RT, and Landmaster BW require a minimum of six hours without rainfall to provide effective weed control. A 24-hour rainfast period is preferable.

Don't give downy brome or jointed goatgrass a chance to produce seed in your fallow during this wet spring. You will be reminded of your mistake for many wheat crops to come.

Drew Lyon, Extension Dryland Cropping Systems Specialist
Gail Wicks
Extension Weeds Specialist
Bob Klein, Extension Cropping Systems Specialist

Precipitation record

	May 8-May 14			*April 1-April 30*		
	Act	*Nrm*	*%*	*Act*	*Nrm*	*%*
Ainsworth	1.18	.77	153	6.10	3.63	168
Alliance	1.27	.75	169	3.85	3.17	121
Arthur	1.06	.77	138	3.62	3.33	109
Beatrice	1.06	.91	116	8.73	4.43	197
Central City	2.09	.91	230	5.41	4.48	121
Clay Center	.51	.91	566	.54	4.40	149
Concord	2.12	.87	244	7.66	4.39	174
Curtis	.20	.77	264	.96	3.49	142
Gordon	2.83	.70	405	5.55	3.29	169
Grant	.24	.70	343	.23	3.24	100
Holdrege	.56	.95	595	.92	3.94	150
Lincoln	1.51	.85	1788	.53	4.45	192
McCook	.31	.77	415	.63	3.48	162
Mead	.83	1.12	747	.47	5.65	132
North Platte	.31	.77	413	.94	3.53	112
O'Neill	1.06	.70	152	6.81	3.67	186
Ord	1.73	.72	241	4.37	3.68	119
Red Cloud	.96	.92	1046	.96	4.06	171
Rising City	1.26	.56	225	8.15	3.75	217
Scottsbluff	2.12	.63	336	4.45	2.82	158
Shelton	.26	.84	315	.70	4.18	136
Sidney	4.92	.70	703	6.97	2.89	241
Tarnov	.87	.91	955	.86	4.11	143

Check wheat's susceptibility to rust and be prepared to treat

Leaf rust should be appearing in Nebraska within the next couple of weeks. Rust is building up rapidly from Texas to Kansas but has not been detected in Nebraska because of colder temperatures. However, as temperatures become more normal for mid-May, leaf rust will begin to develop and may develop rapidly if our moisture pattern continues on into June.

The leaf rust pathogen is a dynamic fungus capable of forming new races each year, some of which may attack previously resistant wheat varieties. This is the primary reason that leaf rust resistance in a variety is not permanent. Some times these shifts in rust races occur rapidly and the resistance is broken within a few years after a variety is released.

Based on recent surveys, Nebraska has the potential for an excellent 1995 wheat crop. With the rust situation to the south of us, the potential for severe leaf rust also is very good. Growers with a variety from the susceptible or moderately susceptible list should scout their fields regularly for the remainder of May, and also have a source of fungicide located along with someone to make the application. The time to apply a fungicide is while the upper leaves are still free of infection. Remember it takes about 7 to 10 days from infection until you can see the rust pustules, so you need to be thinking ahead in making the decision to have a field treated.

Since we are getting beyond the Tilt application window, the other fungicide options are Bayleton 50WP at 4 to 6 oz per acre or Bayleton 50WP at 2 oz tank mixed with mancozeb at 1.6 qts. for the flowable or 2 lb. for the wettable powder. Don't forget the spreader sticker. The Bayleton or Bayleton + mancozeb treatments can be applied at boot stage. Bayleton alone can be applied up to 21 days before harvest and the Bayleton + mancozeb up to 26 days before harvest. Our research results have shown that a single application during boot stage usually provides good cost effective leaf rust control.

John E. Watkins
Extension Plant Pathologist

Nebraska wheat varieties susceptible or moderately susceptible to leaf rust.

Abilene	Alliance
Arapahoe	Buckskin
Centura	Colt
Ike	Karl 92
Lamar	Laredo
QT549	QT566
QT577	Rawhide
Redland	Scout 66
Siouxland	TAM 107
Thunderbird	Vista
Vona	Yuma

Correction

Please note that a rate recommended in a CropWatch 95-9 story entitled "Wheat rust potential high" is incorrect. The correct rate for Bayleton applied in a tank mix should be 2 oz. per acre. The correct rate is also listed on the product label.

We apologize for any problems this may have caused.

John Watkins
Extension Plant Pathologist

Leafy spurge parasite not approved for use in US

A leafy spurge parasite that has been approved for release in Canada but not in the United States is being promoted for use in Nebraska. The scientific name for this organism is *Euphorbiana lobesia.* It causes similar effects to the plant as the gall midge, *Spurgia esulae,* does. Essentially, the leaf tips are tied together, but actual galls are not formed.

Research on *E. lobesia* indicates that it has an unacceptably wide host range and has the potential to become a pest on some valuable plants if released. Therefore, it is illegal to buy or release it into this country and advertisements or solicitations regarding its use should be ignored.

Steve Danielson
Extension Entomologist

Specialist addresses your fertility questions

How much nitrogen is still available?

The abnormal season so far has caused producers to ask questions about either the effectiveness of their earlier applied nitrogen or how they should plan to apply their remaining nitrogen fertilizer for corn and sorghum.

What is the status of nitrogen applied earlier?

Some ammonia was applied in late March and/or early April. This nitrogen has been in the soil for more than two months and there is concern about leaching. Actually soil temperatures at 4 inches deep across the state in April averaged 9° F below normal with the average for the month well below 50° F. Even from May 1 to May 11 soil temperatures ranged from 41° F at Lexington to a high of only 55° F at Red Cloud.

Since soil temperatures have remained low, nitrification of ammonia N (ammonium) has been slow. Most ammonia N is still present as ammonium and therefore has not been subjected to extensive leaching from excess precipitation. Other nitrogen forms such as solution nitrogen (28%), urea, or ammonium nitrate does have greater leaching potential because they contain, with the exception of urea, some nitrate-N which is not held in the soil and moves with soil water.

While we have had many cloudy-rainy days, total precipitation from April 1 until May 11 ranges from 20% above normal in the northwest to a small area of 100% above normal in the southeast (see page 72). Most areas have received 40% to 80% above normal precipitation or from 2 to 4 inches more than normal. Except for very sandy soils this amount of precipitation has probably not caused major leaching problems. In addition, since most preplant nitrogen other than ammonia is applied with herbicide, little nitrogen other than ammonia has been applied.

How does leaching affect the nitrogen recommendation based on a preplant soil residual nitrate test?

If a soil test for residual nitrate was low, the potential for leaching obviously does not matter. If the test showed high nitrate-N content, especially in the top two feet, some downward movement could be expected. Since the soil profile was probably not completely at field capacity at the beginning of the season, little nitrate-N has probably been leached below the root zone. However, if soil nitrates were high in the top two feet, this nitrate has probably moved down so it is somewhat less available. At most, one could perhaps justify applying 10% more nitrogen than originally recommended.

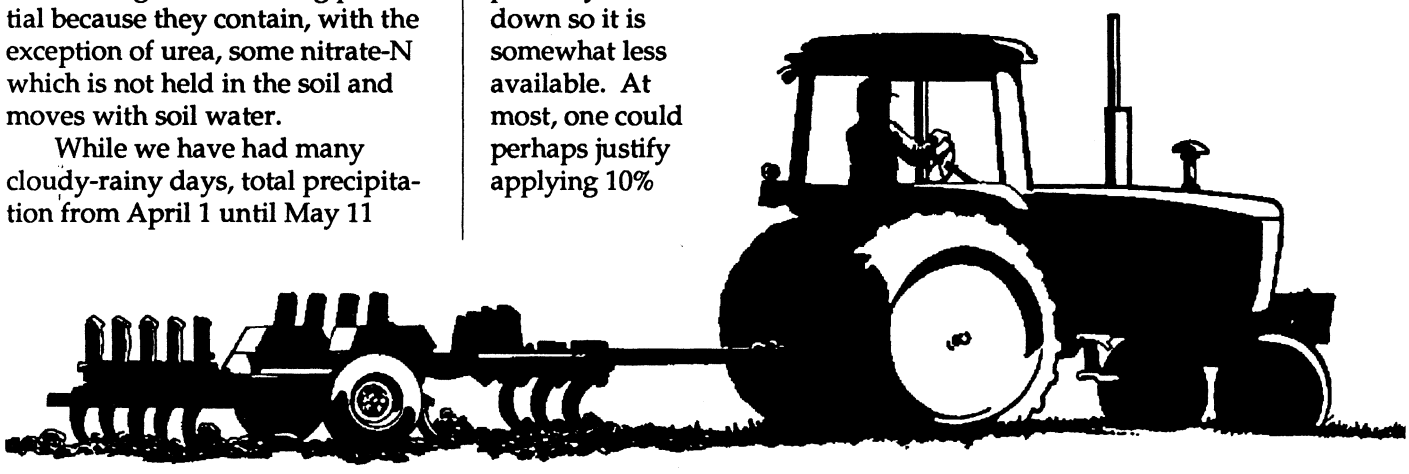
What are the precautions for planting within a couple of days or immediately after ammonia application?

Ammonia increases soil pH in the release area to levels that are toxic to root growth. Therefore, until mineralization to nitrate occurs, seedlings that are directly over the injected band area may become redish in color, stunted and may die. To prevent or lessen this problem, apply ammonia so bands cross at an angle to the rows; apply in as narrow a spacing as possible, and apply deeper -- to keep the band further below the seed.

Why not sidedress N?

Sidedressing may be the best option right now because timely planting is more important at this point than getting nitrogen on preplant. A late soil test for nitrate can also be used prior to sidedressing to determine if additional nitrogen is needed.

Don Sander
Extension Soils Specialist

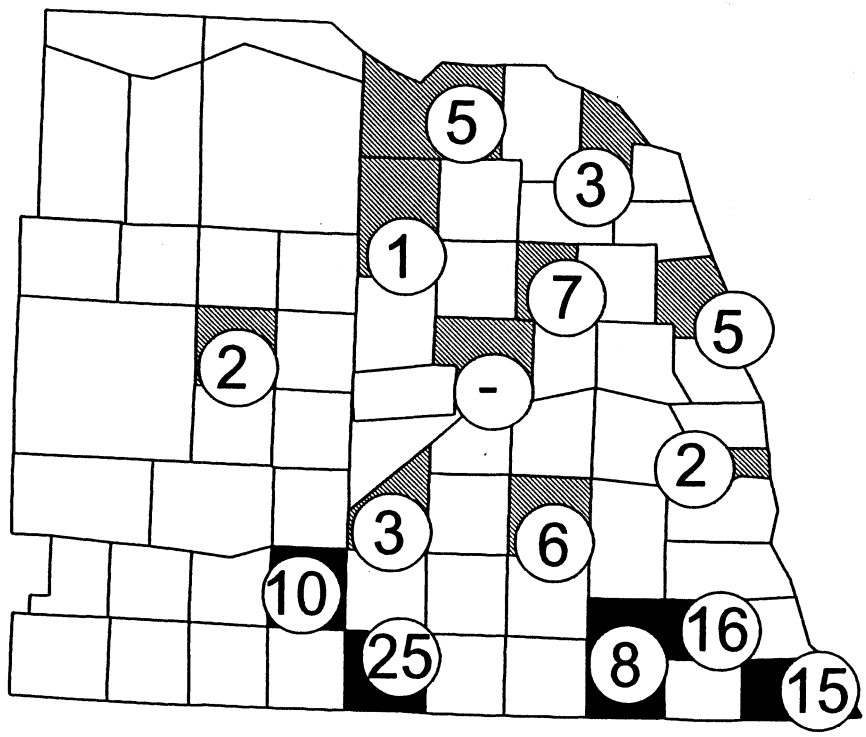


Black cutworm moth captures begin to decline

Significant captures of black cutworm moths correlated with south winds occurring May 8. Growing degree days are now accumulating more normally, but only about 200 GDD have accumulated since mid-April, meaning that black cutworms are predicted to first reach capability to cut plants around May 25 in southeast Nebraska.

Scout fields prior to predicted cutting dates or after corn has emerged. Dig into the soil around damaged or wilted plants to recover black cutworms. Injury by dingy cutworms, wireworms, seedcorn maggots or seedcorn beetles is also a possibility.

Jim Kalisch, Extension Technologist, Entomology



Black cutworm moth captures May 8 - 14

Black indicates counties with significant captures (eight or more moths captured over a two-night period).

Limit compaction: Avoid extra field trips

Soil compaction is easier to avoid now then it is to fix midseason. Compaction can influence seed germination, emergence and early growth.

Tracks created in the soil by tillage or planting operations, the seed opener or packer wheels contribute to compaction, so avoid unnecessary trips. The water content of soil when you plant also is a significant factor. When possible, avoid planting into excessively wet soils.

Irregular and delayed seedling emergence, spotty plant stands, darkened seedling color, and poor seedling vigor are the major visual observations that alert us to compaction. These problems also could be due to other factors such as poor seed germination rates, planter/drill seed feed mechanism problems, nutrient deficiency, and disease or insect damage.

To determine if compaction is really the cause of the problem, inspect plant roots near the time of cultivation. Dig up plants in the field that seem to be affected by compaction. Include about 4 inches of soil. Also, dig where plants should be growing, but aren't. Shake and/or wash out the plant roots or seed. Look for gnarled plant roots or a shoot that looks deformed growing from the seed.

Sometimes plants can recover from compaction-induced stress early in the season. However, there are no midseason corrections to eliminate compaction and its ramifications. Some people have tried subsoiling between the rows of growing plants, but plant roots can be sheared off or torn from the plant and precious soil moisture can be lost. This can lead to additional stress during pollination and grain filling. Even in irrigated situations, in-row subsoiling is not recommended.

The best option to reduce compaction causing stress in the early stages of plant growth is to avoid activities that create compaction. If compaction is evident this season, alter field operations next year. Try fewer trips across the field, plant into drier soils, and adjust the packer wheels to apply less pressure.

Alice J. Jones
Extension Specialist, Soil Erosion Control/Conservation Tillage

Nebraska crop report

Winter wheat condition was rated at 1% poor, 12% fair, 66% good, and 21% excellent. About 85% of the acreage had jointed by the end of the week, compared with 79% last year and 81% for the five-year average.

Corn planting continued to show little progress last week with only 11% of acreage seeded by week's end. This compares to 86% last year and 72% for the five-year average. Some producers were concerned about the possible shortage of shorter season hybrids.

Oat seeding had reached 99% completion by week's end. Last year at this time, producers had been finished seeding for a week, while the five-year average was 99% complete. Some intended oats acres may not be planted to oats this spring due to planting delays.

Sugar beet plantings were delayed last week due to wet field conditions. Rains should benefit this year's crop, but delayed final plantings and cultivation for weed control.

Alfalfa condition was rated 2% poor, 21% fair, 69% good, and 8% excellent. Growth continued to be slowed due to cool, wet conditions.

Nebraska Agricultural Statistics Service, May 15

Kansas alfalfa report

This week the Kansas Department of Agriculture advised growers in the more northern and western areas of the state to recheck alfalfa for possible weevil damage.

As late as May 10, weevil larvae were still heavy in two fields of 10-12 inch alfalfa in Republic and Washington counties in north central Kansas.

Kansas Insect Pest Survey May 12, 1995

Alfalfa weevil alert

If we are going to find alfalfa weevil larval damage this season, it should be appearing in fields across Nebraska now. Growing degree days for the weevil are calculated with the base temperature of 48°F from Jan 1.

Generally, weevil egg hatch is expected at 200 GDD, feeding damage should be noticeable at 300 GDD, larval feeding should peak at 600 GDD, and new adult numbers should peak at 1100 GDD.

Few reports of alfalfa weevil damage have been received; however, we still expect that significant problems will occur in at least some locations across the state based on what normally occurs. It is always difficult to predict what will happen with insects in any given season, so growers should continue to scout their alfalfa fields and be prepared to treat or harvest if economic infestations are discovered.

Steve Danielson
Extension Entomologist

Growing degree day accumulations

as of May 14

	Celsius		*Fahrenheit*			
Accumulated	*Base 0°*		*Base 40***		*Base 48****	*Base 50*****
from	*3/1*	*4/1*	*3/1*	*4/1*	*1/1*	*5/1*
Ainsworth	1053	823	653	495	417	61
Alliance	1024	784	657	491	410	58
Arthur	1077	833	691	520	457	57
Beatrice	1364	1130	883	725	533	79
Central City	1243	1022	785	638	474	65
Clay Center	1273	1045	826	670	507	67
Concord	1058	904	632	543	332	64
Curtis	1243	1007	799	634	541	68
Elgin	1081	887	652	530	368	61
Gordon	966	734	603	445	358	53
Grant	1164	903	767	579	529	67
Holdrege	1304	1067	860	692	584	75
Lincoln	1419	1174	900	740	528	83
McCook	1335	1080	874	692	613	81
Mead	1269	1060	805	669	468	79
North Platte	1209	964	781	607	528	65
O'Neill	1062	860	667	529	396	59
Ord	1169	950	749	601	453	62
Red Cloud	1367	1127	895	729	566	80
Rising City	1216	1008	759	623	436	65
Scottsbluff	1112	853	725	544	464	57
Shelton	1276	1049	820	667	525	68
Sidney	1067	805	689	511	447	53
Tarnov	1135	937	710	579	401	61
West Point	1150	970	706	593	388	70

*Recent research on winter wheat development uses the 0°Celsius (32°F) base.
**Base 40 has traditionally been used to track winter wheat development.
***Base 48 is used to track alfalfa weevil development.
****Base 50 is used to track corn, sorghum and soybeans.

Crop options after corn herbicide use

Delayed planting due to wet weather may cause farmers to change plans and plant a different crop even though a corn herbicide had already been applied. Farmers who have already planted corn which has been damaged by flooding, hail or insects also may replant to a crop other than corn. Planting options vary according to what herbicides were previously applied.

The following table lists planting options based on our judgment for various herbicides with the time delay required between application and planting. These estimates can be influenced by several factors including application rate, soil organic matter content, and pH.

One method of planting into soil containing damaging herbicide residues is to set furrow openers on the planter to remove the surface soil. A heavy rain after planting would negate this technique and may result in the crop being "silted under." Use herbicides only as needed on the new crop.

Alex Martin
Extension Weeds Specialist
John McNamara
Extension Assistant
Weed Science

Replant options

Herbicide	*Replant Crops*	*Time Delay*
Accent	Corn	None
Atrazine	Corn, Sorghum	None
Banvel	Corn, Sorghum	15-30 days
Clarity		(depending on rate)
Battalion	Corn only	None
Beacon	Corn	None
Bicep/Bicep Lite	Corn, Sorghum (safened seed)	None
Bladex	Corn	None
	Sorghum, Soybeans	15-30 days
		(depending on rate)
Broadstrike + Dual	Corn, Soybeans	None
Broadstrike + Treflan	Soybeans	None
Buctril/Atrazine	Corn, Sorghum	None
Bullet	Corn, Sorghum (safened seed)	None
Cycle	Corn	None
	Sorghum (safened seed)	0-15 days
Dual/Dual II	Corn, Sorghum (safened seed)	None
	Soybeans	None
Eradicane	Corn	None
	Sorghum	30 days
	Soybeans	10-15 days
Extrazine II	Corn	None
	Sorghum	15-30 days
		(depending on rate)
Frontier	Corn, Soybeans	None
Guardsman	Corn only	None
Harness Plus	Corn, Sorghum (safened seed)	None
Harness Xtra	Corn only	None

(Continued on page 74)

Crop options after corn herbicide *(Continued from page 73)*

Herbicide	*Replant Crops*	*Time Delay*
Laddok	Corn, Sorghum	None
Lasso	Corn, Sorghum (safened seed)	None
	Soybeans	None
Lariat	Corn, Sorghum (safened seed)	None
Marksman	Corn	None
	Sorghum	30 days
Micro-Tech	Corn, Soybeans	None
Princep	Corn only	None
Prowl	Soybeans, Sunflowers	None
Pursuit	Corn (IR, IT), Soybeans	None
Pursuit Plus	Soybeans	None
2,4-D	Corn	0-7 days
	Sorghum	7-10 days
	Soybeans	7-30 days
Ramrod	Corn, Sorghum, Soybeans	None
Ramrod/Atrazine	Corn, Sorghum	None
Sutan	Corn	None
	Sorghum	30 days
	Soybeans	10-15 days
Surpass	Corn only	None
Surpass 100	Corn	None
Sutazine	Corn	None
	Sorghum	30 days
Tough	Corn, Soybeans/Sorghum	None